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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/747,781	12/29/2003	Frederick A. Jelley	60130-1734;02MRA364,368	6425

26096 7590 03/27/2006

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EXAMINER	
BURCH, MELODY M	
ART UNIT	**PAPER NUMBER**
3683	

DATE MAILED: 03/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/747,781	JELLEY ET AL.	
	Examiner	Art Unit	
	Melody M. Burch	3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 January 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) *7,9-11 and 16* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,8,12-15 and 17-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 8, 12-15, 18, 19, 21, and 22 rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 3207267 to Beuchle et al.

Re: claims 1, 12, 13, 19, 21 and 22. Beuchle et al. show in figure 2 a self-energizing brake assembly comprising: a support 5,18 pivotally mounted at an angle relative to a rotatable member 1, and a brake pad 3,11,12 movable along the support between engaged and disengaged positions with the rotatable brake member to generate a braking force between the brake pad and the rotatable brake member.

Re: claims 8, 14, and 18. In an alternate interpretation of claim 1, Beuchle et al. show in figure 2 a self energizing brake assembly comprising a support 3 pivotally mounted at an angle relative to a rotatable member 1, and a brake pad 11,12 movable along the support as disclosed in col. 2 line 71-col. 3 line 5 and in col. 3 line 15-18 between engaged and disengaged positions with the rotatable member and the limitation of the assembly comprising a drive actuator 8 to apply a force to the brake pad via intervening elements by decreasing the angle between the rotatable brake member and the support as disclosed in col. 3 lines 15-20.

Re: claim 15. Beuchle et al. show in figure 2 the limitation wherein the step a.) comprises slidably (via the movement through slot 23 shown in figure 1) supporting the brake pad at an angle relative to the rotatable member and varying the angle relative to the braking force as disclosed in col. 3 lines 15-20.

3. Claims 1-6, 12-15, 17, and 18-22 are rejected under 35 U.S.C. 102(b) as being anticipated by DE-1169218 (DE'218).

Re: claims 1, 12-15, and 18-22. DE' 218 shows in the figure a self-energizing brake assembly comprising: a support 19,25 pivotally mounted at an angle relative to a rotatable member 3, and a brake pad 13,17 movable along the support between engaged and disengaged positions with the rotatable brake member to generate a braking force between the brake pad and the rotatable brake member wherein the angle of the support is variable for controlling a gain in the braking force.

Re: claim 2. DE'218 shows the brake pad comprising a wedge 13 and a friction element 7,17,27 pivotally mounted to the wedge (via its connection to portion 17 which is pivotally mounted to the wedge as broadly recited).

Re: claim 3. DE' 218 shows in the figure the limitation wherein engagement between the friction element and the rotatable member drives the brake pad along the support toward the rotatable brake member to increase braking force via element 11 riding up the ramp 9 of element 7.

Re: claims 4-6. DE' 218 shows the assembly comprising an adjustable member 27 biasing the support toward the rotatable brake member.

Re: claim 17. In an alternate interpretation of DE' 218element 17 is supporting a brake pad 13 on an angle and elements 19 and 25 bias the brake pad toward engagement with the rotatable brake member with an adjustable member 19,25 which is adjustable by virtue of it being pivotable and translatable and moving the adjustable member in proportion to the gain in braking force.

Response to Arguments

4. Applicant's arguments filed 1/17/06 have been fully considered but they are not persuasive.

With regards to claims 1 and 22 of the Beuchle et al. reference, Applicant argues that the reference does not disclose or suggest the control of the self energizing gain by varying the angle of the support. Examiner disagrees and notes that by varying the angle of the support 5,18, the support can be situated such that humps 21 and the right hand portions of elements 11 and 12 engage element 1 such that the frictional contact between the disk elements 1 and 12 cause elements 11 and 17 to move with respect to the slot 23 such that element 15 rides up the flank of element 16 resulting in a self-energizing gain in the braking force as disclosed in col. 3 lines 14-30. Thus, the reference shows the support being variable for controlling a self-energizing gain in the braking force. Examiner notes that the control of the gain in braking force (i.e. the placement of the device such that gain is or is not effected) is achieved by varying the angle of the support (i.e. moving the support such that it does or does not contact humps 21), as broadly recited.

With regards to claim 12, Applicant argues that the claim requires the brake pad to contact an outer perimeter of the rotatable brake member and that the brake pad of the Beuchle et al. device contacts planar surfaces. Examiner agrees that the brake pad of Beuchle et al. contacts the planar surfaces but notes that the planar surface make up a portion of the perimeter of the rotatable brake member. Webster's Collegiate Dictionary 10th Edition defines perimeter as the "outer limits" of something. Examiner notes that Beuchle et al. show the planar surfaces with which the brake pads contact make up a portion of the outer limits of the rotatable brake member.

With regards to the DE'218 reference, Applicant argues that there is no movement of the brake pads along the support as s pinned pivotal connection does not allow movement along a support. The brake pad 13,17 is movable along the support 19,25 since portion 17 of the brake pad pivots about a point shown to the right of the lead line of element 19. A pivot about the support is a form of movement in a circumferential direction along the support, as broadly recited. Applicant further argues that there is no structure that would provide for an amplification of braking force. Examiner disagrees and notes that the braking force amplification structure is provided in the form of balls 11 riding up the flanks of recesses 9 as disclosed in col. 3 lines 28-37 of the reference.

With regards to claim 2 with respect to the DE'218 reference, Applicant argues that element 17 is not a friction element. Examiner maintains that the brake pad 13,17 includes a wedge 13 and a friction element 17. As broadly recited, Examiner has interpreted a friction element to be an element that creates friction. Since element 17 of

the brake pad moves or pivots with respect to surrounding elements, it generates friction as a result of such movement. Therefore, as broadly recited, it is maintained that element 17 is a friction element.

With regards to claim 3 with respect to DE'218, Applicant argues that the claims require that the rotatable brake member drive the brake pad along a support toward the rotatable brake member to increase braking force. Examiner maintains that the contact of the brake member 3 with portion 7 of the brake pad cause the balls 11 to ride along flanks 9 causing movement or pivoting of portion 17 along support 19 while moving portion 7 of the brake pad toward the rotatable brake member to increase braking force.

With regards to claim 4 with respect to DE'218, Examiner maintains that at least right hand portions of element 19 of the support are biased axially to the left toward the rotatable brake member since the spring 27 pulls element 7 and 17 toward each other.

With regards to claims 5 and 6 with respect to DE'218, Examiner maintains that element 27 is compliant since it is clearly shown to be a spring. Examiner also maintains that element 27 represents a linear actuator since it actuates the movement of surrounding components along the axis of the spring, as broadly recited.

Examiner has submitted a request for a translation of the foreign reference DE'218 that Applicant submitted with the IDS of 5/31/05.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 571-272-7114. The examiner can normally be reached on Monday-Friday (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James McClellan can be reached on 571-272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mmb
March 22, 2006

Melody M. Burch
Melody M. Burch
Primary Examiner
Art Unit 3683
3/22/06